



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,739	01/21/2000	David Andrew D'Zmura		6203

7590 10/13/2004
David Andrew D'Zmura
P O Box 621
Indio, CA 92201-0621

EXAMINER

PWU, JEFFREY C

ART UNIT	PAPER NUMBER
----------	--------------

2143

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/489,739

Applicant(s)

D'ZMURA, DAVID ANDREW

Examiner

Jeffrey Pwu

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 6/17/2004 amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52-61 is/are allowed.
- 6) ☒ Claim(s) 62 and 63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3628

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 62 and 63 are rejected under 35 U.S.C. 102(e) as being unpatentable over

Makivic (U.S. 6,061,662).

Makivic discloses

- An apparatus, processing data or transactions, an automated arbitrage engine, useful for automated computation and identification of profitable arbitrage differentials, comprising:
means inputting data from storage, from data-stream of an analytic valuation engine, or from real-time data-feed, said data comprising at least security's variables of price and yield;
means computing an arbitrage differential between market yield and governing yield, wherein calculating the magnitude and direction of said differential by uniform procedure;
means computing an arbitrage differential between precise price change and actual, wherein calculating the magnitude and direction of said differential by uniform procedure;
means sorting arbitrage opportunities by profit or loss, or spread or notch premiums. (col. 2, line58-col.4, line 6)
- An integrated computer-based financial information and transaction processing system (HPCC) providing analytic processing, assessment of arbitrage spreads and execution of transactions,

Art Unit: 3628

useful for automated computation of values and sensitivities, for automated computation of arbitrage differentials, and for real-time processing of transactions based thereon, comprising: business logic computational engines of two core server-based systems: an analytic valuation engine (fig.1, "valuation server"), to facilitate the computation of governing yield and its derivatives data set and to facilitate the computation of change in price for given change in yield over a period of time (FIG. 3 represents exemplary system output showing a histogram of price changes and a Gaussian fit); and an automated arbitrage engine, to facilitate the computation of arbitrage differentials between governing yield and market yield and arbitrage differentials between precise price change and actual notched price change for a given change in yield over a period of time (Fig.3); real-time financial data-feed, wherein each said core business logic server receiving market pricing data from said data-feed, said data fed to cores for computational processing (Figs.3-4); porting connections between core business logic engines and from each said engine to output, rendering and storage devices, such devices comprise printers, terminals and memory (Fig.1); automated control sequences providing execution of computer-driven transactions; telecommunications connections between system comprised of engines and external entities, such entities comprise the group of exchanges, broker/dealers, and investment entities (12, 20, 25, 26, 40, 50, 30); protective devices, such comprise the group of encryption, gate-keepers and firewalls (Fig.1).

Allowable Subject Matter

3. Claims 52-61 are allowed.

Response to Arguments

4. Applicant's arguments with respect to claims 52-63 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Pwu whose telephone number is 703 308-7835. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyun Sough can be reached on 703 308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).\



JEFFREY PWU
PRIMARY EXAMINER